

Appl. No. 10/646,239
 Attorney Docket No.: 2002B117/2
 Amdt. dated November 17, 2005
 Reply to Office Action of August 17, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in this application.

Listing of Claims:

Claims 1-55 (Canceled).

56. (Currently Amended) A multilayer stretch film comprising:
 a first surface layer,
 a second surface layer, and
 a core layer disposed between the first and second surface layers,
 wherein the core layer comprises a polyethylene copolymer having a Compositional Distribution Breadth Index (CDBI) of at least 70%, a melt index $I_{2.16}$ of from 0.1 to 15 g/10 min., a density of from 0.910 to 0.940 g/cm³, a melt index ratio $I_{21.6}/I_{2.16}$ of from 30 to 80, and an Mw/Mn ratio of from 2.5 to 5.5, and
 wherein the film having has a natural draw ratio of at least 250%, a tensile stress at the natural draw ratio of at least 22 MPa, and a tensile stress at second yield of at least 12 MPa, as measured according to ASTM D-882/97.
57. (Original) An article wrapped with the film of Claim 56.
58. (New) The film of claim 56, wherein the film has a dart impact strength D, a modulus M, where M is the arithmetic mean of the machine direction and transverse direction 1% secant moduli, and a relation between D in g/μm and M in MPa such that:

$$D \geq 0.0315 \left[100 + e^{\left(11.71 - 0.03887M + 4.592 \times 10^{-5} M^2 \right)} \right].$$

59. (New) The film of claim 56, wherein the natural draw ratio is at least 275%.
60. (New) The film of claim 56, wherein the natural draw ratio is at least 300%.

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61. (New) The film of claim 56, wherein the tensile stress at the natural draw ratio is at least 24 MPa.
62. (New) The film of claim 56, wherein the tensile stress at the natural draw ratio is at least 26 MPa.
63. (New) The film of claim 56, wherein the tensile stress at second yield is at least 14 MPa.
64. (New) The film of claim 56, wherein the film has a tensile stress at first yield of at least 9 MPa.
65. (New) The film of claim 56, wherein the CDBI is at least 75%.
66. (New) The film of claim 56, wherein the CDBI is at least 85%.
67. (New) The film of claim 56, wherein the melt index is from 0.3 to 10 g/10 min.
68. (New) The film of claim 56, wherein the density is from 0.916 to 0.940 g/cm³.
69. (New) The film of claim 56, wherein the density is from 0.918 to 0.935 g/cm³.
70. (New) The film of claim 56, wherein the melt index ratio is from 35 to 60.
71. (New) The film of claim 56, wherein the Mw/Mn ratio is from 2.8 to 4.5.
72. (New) The film of claim 56, wherein the Mw/Mn ratio is from 3.0 to 4.0.
73. (New) An article wrapped with the film of Claim 56.
74. (New) A multilayer stretch film comprising:
at least one first layer, and
at least one second layer, wherein any one or more layers comprises a polyethylene copolymer with a Compositional Distribution Breadth Index (CDBI) of at least 70%, a melt index I_{2.16} of from 0.1 to 15 g/10 min., a density of from 0.910 to 0.940 g/cm³, a melt index ratio I_{21.6}/I_{2.16} of from 30 to 80, and an Mw/Mn ratio of from 2.5 to 5.5, wherein:

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the film has a natural draw ratio of at least 250%, a tensile stress at the natural draw ratio of at least 22 MPa, and a tensile stress at second yield of at least 12 MPa, as measured according to ASTM D-882/97; and

wherein a yield plateau of the film has a linear portion with a slope of at least 0.020 MPa per % elongation.

75. (New) The film of claim 74, wherein the film has a dart impact strength D, a modulus M, where M is the arithmetic mean of the machine direction and transverse direction 1% secant moduli, and a relation between D in g/μm and M in MPa such that:

$$D \geq 0.0315 \left[100 + e^{(11.71 - 0.03887M + 4.592 \times 10^{-5} M^2)} \right]$$

76. (New) The film of claim 74, wherein the tensile stress at the natural draw ratio is at least 26 MPa, and the natural draw ratio is at least 300%.

77. (New) The film of claim 74, wherein the film has a tensile stress at first yield of at least 9 MPa, and a second yield of at least 14 MPa, both yields measured according to ASTM D-882/97

78. (New) The film of claim 74, wherein the CDBI is at least 85%; the melt index ratio is from 35 to 60; and the Mw/Mn ratio is from 3.0 to 4.0.

79. (New) The film of claim 74, wherein the melt index is from 0.3 to 10 g/10 min, and the density is from 0.918 to 0.935 g/cm³.

80. (New) An article wrapped with the film of Claim 74.

81. (New) A method of wrapping an article, comprising:
providing an article;
providing the stretch film of claim 56; and
wrapping the article with the stretch film.

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82. (New) The method of claim 81, wherein the stretch film is provided in a pre-stretched condition.

83. (New) The method of claim 81, further comprising applying a stretching force to the film before or during the step of wrapping the article with the stretch film.